November 21, 1867.

Lieut.-General SABINE, President, in the Chair.

In pursuance of the Statutes, notice was given from the Chair of the ensuing Anniversary Meeting, and the list of Officers and Council proposed for election was read as follows:—

President.—Lieut.-General Edward Sabine, R.A., D.C.L., LL.D.

Treasurer.—William Allen Miller, M.D., LL.D.

Secretaries.— { William Sharpey, M.D., LL.D. George Gabriel Stokes, Esq., M.A., D.C.L., LL.D.

Foreign Secretary. - Prof. William Hallows Miller, M.A., LL.D.

Other Members of the Council.—Frederick Augustus Abel, Esq.; William Benjamin Carpenter, M.D.; Prof. A. Cayley, LL.D.; Jacob Lockhart Clarke, Esq.; John Evans, Esq.; Capt. Douglas Galton, C.B.; John Peter Gassiot, Esq.; John Hall Gladstone, Esq., Ph.D.; Sir Rowland Hill, K.C.B., D.C.L.; William Huggins, Esq.; Thomas Henry Huxley, Esq., Ph.D.; Prof. John Phillips, M.A., LL.D.; Prof. Andrew Crombie Ramsay, LL.D.; Colonel William James Smythe, R.A.; Lieut.-Col. Alexander Strange; Thomas Thomson, M.D.

The President stated that Colonel John Le Couteur, who by reason of non-payment of his annual contribution ceased to be a Fellow of the Society at the last Anniversary, had applied for readmission; and an extract from his letter to the Council was read, explaining the circumstances under which, during his absence on the Continent, the omission of payment had taken place. Notice was accordingly given that the question of Colonel Le Couteur's readmission would be put to the ballot at the next meeting.

Mr. Gassiot, Mr. Gwyn Jeffreys, Sir John Lubbock, Mr. Rennie, and Mr. Savory, having been nominated by the President, were elected by ballot Auditors of the Treasurer's Accounts on the part of the Society.

Mr. W. Boyd Dawkins was admitted into the Society.

The following communications were read:-

- I. "On a New Class of Bodies Homologous to Hydrocyanic Acid."
 I.—By A. W. Hofmann, F.R.S. Received August 20, 1867.
 (See page 144.)
- II. "On a New Series of Bodies Homologous to Hydrocyanic Acid."
 —II. By A. W. Hofmann, LL.D., F.R.S. Received August
 31, 1867. (See page 148.)
- III.—"On a New Series of Bodies Homologous to Hydrocyanic Acid."—III. By A. W. Hofmann, LL.D., F.R.S. Received September 7, 1867. (See page 150.)

VOL. XVI.

- IV.—"Second Supplementary Paper on the Calculation of the Numerical Value of Euler's Constant." By WILLIAM SHANKS, Houghton-le-Spring, Durham. Communicated by the Rev. Professor Price. Received August 29, 1867. (See page 154.)
- V. "Addition to Memoir on the Resultant of a System of Two Equations." By A. CAYLEY. Received August 6, 1867.

(Abstract.)

The elimination tables in the memoir on the Resultant of a System of two Equations (Phil. Trans. 1857, pp. 703–715), relate to equations of the form $(a, b... (x, y)^m = 0)$, without numerical coefficients; but it is, I think, desirable to give the corresponding tables for equations in the form $(a, b... (x, y)^m = 0)$, with numerical coefficients, which is the standard form in quantics. The transformation can of course be effected without difficulty, and the results are as here given. It is easy to see à priori that the sum of the numerical coefficients in each table ought to vanish; these sums do in fact vanish, and we have thus a verification as well of the tables of the present addition as of the tables of the original memoir, by means whereof the present tables were calculated.

VI. "Contributions to the History of Methylic Aldehyde." By A. W. Hofmann, LL.D., F.R.S. Received September 30, 1867.

"The aldehyde of the methyl-series is not known;" all the chemical manuals say so, and for the last twenty years my students have been duly informed thereof. It will scarcely appear strange that more efforts to become acquainted with that body should not have been made, since the masterly picture which Liebig has delineated of the aldehyde par excellence embraced as it were the history of the whole class, and of course also of the aldehyde in question. Nevertheless methylic aldehyde deserves our consideration for more than one reason. As one of the simplest terms of the monocarbon-series, occupying a position intermediate between marshgas and carbonic acid, as a link of transition connecting methylic alcohol and formic acid, as either aldehyde or acetone, according to the point of view from which we look upon it, the compound CH_oO illustrates a greater variety of relations than any one of the higher aldehydes. But in addition to the interest with which the methyl-compound has thus always been invested, this substance possesses special claims upon our attention at the present moment. Our actual method of treating organic chemistry for the purposes of instruction almost involves the necessity of starting from the methyl-series. The simplest of aldehydes thus acquires quite an especial importance, and all those who, like the author of this note, are engaged in teaching, cannot fail to have sadly missed a compound which is the carrier of such varied and interesting considerations.

The desire which I have frequently felt in my lectures of developing the idea of the genus aldehyde, when speaking of the methyl-compounds, has